

We claim:

(1) A multipositional accessory support shelf mechanism for conveniently placing one or more handheld items thereon while operating a computer keyboard, comprising:

- (i) a first bracket means; the first bracket means having an attaching means for securely positioning the first bracket means to a work surface;
- (ii) a second bracket means having an accessory shelf connected thereto;
- (iii) a pair of linkage arms; one end of each arm is connected to the first bracket means at a spaced interval; and the other end of each linkage arm is connected to the second bracket means at a spaced interval; and
- (iv) the attaching means is configured and disposed on the first bracket means to permit ready movement of the first bracket means from a first area of the work surface to a second area of the work surface.

(2) The support mechanism of claim 1, wherein the work surface is a keyboard support tray.

(3) The support mechanism of claim 1, wherein the work surface is a desk, table or shelf.

(4) The support mechanism of claim 1, wherein the work surface is a computer.

(5) The support mechanism of claim 1, wherein the attaching means of the first bracket means is capable of permitting removal of the first bracket means from the first

area of the work surface and ready attachment of the first bracket means to the second area of the work surface.

(6) The support mechanism of claim 1, wherein the attaching means of the first bracket is capable of permitting the first means to slide from the first area of the work surface to the second area of the work surface.

(7) The support mechanism of claim 6, wherein the first area and second area of the work surface are both situated along the same edge of the work surface.

(8) The support mechanism of claim 1, wherein the first area and second area of the work surface are both situated along opposite edges of the work surface.

(9) The support mechanism of claim 1, wherein the accessory shelf is suitable for receiving a computer accessory item thereon.

(10) The support mechanism of claim 9, wherein the computer accessory item is suitable for receiving a computer mouse thereon.

(11) The support mechanism of claim 9, wherein the computer accessory item is suitable for receiving a computer mouse pad thereon.

(12) The support mechanism of claim 9, wherein the computer accessory item is suitable for receiving a palm pilot thereon.

(13) The support mechanism of claim 9, wherein the computer accessory item is suitable for receiving a mini-video camera thereon.

(14) The support mechanism of claim 1, wherein the linkage arms are stationarily connected to the first bracket means and second bracket means, respectively.

(15) The support mechanism of claim 1, wherein each end of each linkage arm is pivotally connected to the first bracket means and second bracket means, respectively, thus permitting movement of the accessory shelf while the first bracket means is securely positioned to the work surface.

(16) The support mechanism of claim 1, wherein each end of each linkage arm is pivotally connected to the first bracket means and the second bracket means respectively, thus providing means for moving the second bracket means from a

first area to a second area while the first bracket means is securely positioned to the work surface.

(17) The support mechanism of claim 1, wherein the connection of the linkage arms to the first bracket means and second bracket means is a parallel linkage.

(18) The support mechanism of claim 1, wherein the connection of the linkage arm to the first bracket means and second bracket means is a non-parallel linkage.

(19) The support mechanism of claim 1, wherein the second bracket means comprises a shelf bracket on which an accessory shelf is securely positioned.

(20) The support mechanism of claim 19, wherein the shelf bracket has a surface having at least one aperture for receiving a pin on the accessory shelf, thereby providing a connecting point between the second bracket means and the accessory shelf.

(21) The support mechanism of claim 19, wherein the surface of the shelf bracket has at least one pin for inserting into an aperture on the accessory shelf, thereby providing a connecting point between the second bracket means and the accessory shelf.

(22) The support mechanism of claim 19, wherein the shelf bracket is connected to the second bracket means by utilizing one or more bolts, clamps, hooks, latches, locks, pins, rivets, screws or any combination thereof.

(23) The support mechanism of claim 19, wherein the shelf bracket is fastened to the second bracket means by spot-welding, flat riveting or any combination thereof.

(24) The support mechanism of claim 19, wherein the shelf bracket is pivotally connected to the second bracket means, thus permitting movement of the shelf bracket.

(25) The support mechanism of claim 1, wherein at least a portion of the shelf bracket is positioned on a top surface of the second bracket means.

(26) The support mechanism of claim 1, wherein the attaching means comprises a receptacle for receiving an area of the work surface, enabling the first bracket means to be securely positioned to the work surface.

(27) The support mechanism of claim 26, wherein the receptacle of the attaching means comprises an upper portion and a lower portion; the upper portion or lower portion of the receptacle having a protruding element for insertion into an aperture or guide slot on the work surface; wherein the insertion of the protruding element into the aperture or guide slot enables the first bracket means to be securely positioned to the work surface.

(28) The support mechanism of claim 26, wherein the guide slot is configured so that the protruding element, when inserted therein, enables the first bracket means to be slid along the work surface or portion thereof.

(29) The support mechanism of claim 26, wherein the attaching means is positioned at an end opposite where the linkage arms are attached to the first bracket means.

(30) The support mechanism of claim 1, wherein the upper and lower portions of the receptacle are interconnected to each other; the distance between the upper and lower portions is at least substantially maintained by a biasing means; and

the interconnection of the upper and lower portions through the biasing means enables the receptacle to be readily removed from or secured to the work surface by applying and releasing counter pressure to the biasing means, respectively.

(31) The support mechanism of claim 31, wherein the biasing means comprises a torsion spring mounted on a pivot pin such that the lower and upper portions of the receptacle are disposed in a clothes-pin type configuration relative to each other.

(32) The support mechanism of claim 1, wherein the attaching means comprises a clamping element positioned within the receptacle; the clamping element being movably engaged with the lower portion and upper portion of the receptacle, whereby the receptacle is securely positioned onto the working surface by moving the clamping element in a direction that causes the upper portion and lower portion of the receptacle to contact the work surface

(33) The support mechanism of claim 32, wherein the clamping element has a sloped surface

(34) The support mechanism of claim 32, wherein the angle of the slope of the clamping element is about 1-20°.

(35) The support mechanism of claim 32, wherein the angle of the slope of the clamping element is about 10°.

(36) The support mechanism of claim 32, wherein the upper surface and lower surface of the receptacle came into contact with the work surface by moving the clamping element in a linear direction.

(37) The support mechanism of claim 1, wherein the receptacle comprises a first ramp member and a second ramp member; each ramp member having a top surface and a bottom surface; at least a portion of the top surface of the first ramp member gradually inclines in a first direction; at least a portion of the bottom surface of the second ramp member gradually inclines in a second direction, opposite the first direction:

- (i) the first ramp member is positioned on either the lower surface or upper surface of the receptacle; the second member is positioned on the other of said surfaces; the second ramp member is positioned on top of the first ramp member so that the respective inclined surfaces of each ramp member are placed in opposition of each other; either ramp member is moved upward or downward upon rotating either the first ramp member or second ramp member;
- (ii) the first bracket means is securely positioned to the work surface by rotating either the first ramp member or second ramp member in a first direction, which in turn causes either ramp member to move against the portion of the work surface in the receptacle; and
- (iii) the first bracket means is removed from the work surface by rotating either the first ramp member or second ramp member in a direction

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opposite the first direction, which in turn causes either ramp member to move away from the portion of the work surface in the receptacle.

(38) The support mechanism of claim 37, wherein the first and second ramp member are annular and have surface inclines resemble at least a partial spiral on their respective bottom and top surfaces

(39) The support mechanism of claim 37, wherein a lever is positioned on either the first ramp member or second ramp member; the first ramp member and second ramp member are annually rotated in opposite directions by moving the lever horizontally.

(40) The support mechanism of claim 26, wherein the receptacle has means for receiving and securely holding in place the inserted portion of the work surface by friction, by pressure, by gravity, by suitable friction material, by applying force or a combination thereof.

(41) The support mechanism of claim 1, wherein the second bracket means further comprising a swivel means for permitting the accessory shelf to be swiveled into a desired position.

(42) The support mechanism of claim 41, wherein the swivel means comprises a shelf bracket pivotally connected to the second bracket means; the accessory shelf being connected to the shelf bracket; wherein the point of connection between the shelf bracket and second bracket means is off-center relative to a top surface of the second bracket means.

(43) The support mechanism of claim 41, wherein the swivel means comprises a pivotal connection between the second bracket means and the accessory shelf,

wherein the point of connection between the accessory shelf and second bracket means is off-center to the top surface of the second bracket means.

(44) The support mechanism of claim 1, the second bracket means further comprising a tilt means for permitting the accessory shelf to be tilted into a desired position.

(45) The support mechanism of claim 44, wherein the tilt means comprises a shelf bracket pivotally attached to a rear wall of the second bracket means:

- (i) the rear wall having a pivot pin and a stud extending along a vertical axis;
- (ii) the shelf bracket having a pivot hole for receiving the pivot pin on the rear wall of the second bracket means;
- (iii) the shelf bracket having an aperture for receiving the stud therethrough;
- (iv) the tilt means further comprising a torque knob sized to fit over the stud of the bracket means;
- (v) the torque knob is configured and disposed so that when turned in a first direction the shelf bracket is able to rotate about the pivot pin on the rear wall of the second bracket means into a desired position; the shelf bracket

is maintained in the desired position by applying friction between the shelf bracket and the rear wall of the second bracket means; said friction being applied by turning the torque knob in a second direction, opposite the first direction.



(46) The support mechanism of claim 1, further comprising a first and second stopping means for maintaining the second bracket means in a first position and a second position, respectively; the first position being above the work surface and the second position being at least substantially horizontal to the work surface.

(47) The support mechanism of claim 46, wherein the first stopping means comprises the interconnection between the first and second linkage arms, wherein the second bracket means is maintained in the first position when the proximity between the first and second linkage arms is such that said linkage arms are restricted from further downward movement.

(48) The support mechanism of claim 46, wherein the second stopping means comprises interaction between a top surface of the first bracket means and a bottom surface of the second bracket means; wherein the second bracket means is maintained in the second position when the proximity between the said top surface and bottom surface is such that the second bracket means is restricted from moving further when the second bracket means is moved upward.

(49) The support mechanism of claim 1, further comprising a retention means for stationarily maintaining the mouse pad support when moved in a upward position

(50) The support mechanism of claim 49 wherein the retention means comprises a loaded spring ball and detent positioned inside one of the linkage arms.

(51) The support mechanism of claim 49, wherein the retention means comprises a ratchet and pawl.

(52) The support mechanism of claim 49, wherein the support mechanism comprises a spring means for biasing the linkage arms about the axes of pivots.